



THE ROCKEFELLER UNIVERSITY

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PRESIDENT

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Dr. Dr. Lachowicz:

Thank you for your letter of July 15th.

As to your first question, how the F- character of strain 679-680, T- L-, arose: we have no information except that it happened during the prior history of that lineage. That is mentioned on page 722 of our article in Genetics, Vol. 37:720-730, 1952. Much later we discovered that we could obtain F- derivatives from F+ strains at will, either by selection for high motility in semisolid agar or by treating the cultures with acriflavine.

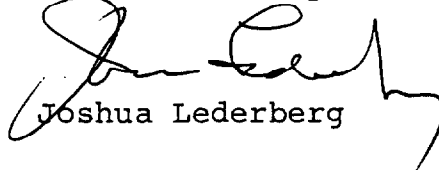
Concerning your own studies on Shigella: what you wrote to me has the earmarks of a phage induced lysogenic conversion. However, one of your sentences said that passage through mice by intraperitoneal injection would have the same effect. In that case you presumably have not added new genetic material with an external bacteriophage. There is still the possibility that a prophage already in the original strain has mutated. One would have to go more thoroughly into the details of your experiments to attempt to answer that question.

There is a nice review of lysogenic conversion of antigenic type by Barksdale in Annual Review of Microbiology, Vol. 28, 1974.

Have you discussed your work with Kunicki-Goldfinger? I had some contact with him many years ago.

With best wishes,

Yours sincerely,


Joshua Lederberg